R50DSP

ELECTRIC GUITAR AMPLIFIER WITH AGX TECHNOLOGY AND BUILT-IN DIGITAL EFFECTS

User’s Manual

May be covered by one or more of the following: U.S. Patents #4538297, 4647876, 4696044, 4745309, 4881047, 4893099, 5124657, 5263091, 5268527, 5319713, 5333201, 5402498 and 5493617.
Other patents pending. Foreign patents pending.
Your Rocktron Rampage R50DSP amplifier has been tested and complies with the following Standards and Directives as set forth by the European Union:


**Standard(s):** EN55022, EN50082-1, EN60065

This means that this product has been designed to meet stringent guidelines on how much RF energy it can emit, and that it should be immune from other sources of interference when properly used. Improper use of this equipment could result in increased RF emissions, which may or may not interfere with other electronic products.

To insure against this possibility, always use good shielded cables for all audio input connections. This will help insure compliance with the Directive(s).

## Precautions

**NOTE:** IT IS VERY IMPORTANT THAT YOU READ THIS SECTION TO PROVIDE YEARS OF TROUBLE FREE USE. THIS UNIT REQUIRES CAREFUL HANDLING.

- All warnings on this equipment and in the operating instructions should be adhered to and all operating instructions should be followed.

- Do not use this equipment near water. Care should be taken so that objects do not fall and liquids are not spilled into the unit through any openings.

- The power cord should be unplugged from the outlet when left unused for a long period of time.

DO NOT ATTEMPT TO SERVICE THIS EQUIPMENT. THIS EQUIPMENT SHOULD BE SERVICED BY QUALIFIED PERSONNEL ONLY. DO NOT MAKE ANY INTERNAL ADJUSTMENTS OR ADDITIONS TO THIS EQUIPMENT AT ANY TIME. DO NOT TAMPER WITH INTERNAL ELECTRONIC COMPONENTS AT ANY TIME. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID THE WARRANTY OF THIS EQUIPMENT, AS WELL AS CAUSING SHOCK HAZARD.

**OPERATING TEMPERATURE**

Do not expose this unit to excessive heat. This unit is designed to operate between 32° F and 104° F (0° C and 40° C). This unit may not function properly under extreme temperatures.
INPUT JACKS - LOW AND HIGH
Connect the output of your guitar to one of the 1/4” input jacks with a shielded guitar cable. Select LOW for normal, or HIGH for extra gain. Plugging into the LOW input will attenuate your guitar’s signal cooling down a “hot” guitar. These two jacks provide slightly different input levels. Experiment with these and adjust to your tastes.

CLEAN Section
- GAIN Control Knob - Turning this knob clockwise determines the amount of gain (or distortion) added to the signal. A wide range of amp tones are available from Pristine clean to Heavy Texas Blues
- LEVEL Control Knob - Turning this knob clockwise determines the overall volume of the CLEAN channel.

CH SELECT Button & CL & OD LEDS
Channel Select button - allows you to select between the CL (CLEAN) channel or the OD (OVERDRIVE) channel. When the CL LED is ON (or lit) the Clean Channel is active. When the OD LED is ON (or lit) the OVERDRIVE Channel is active.

OVERDRIVE Section
- GAIN Control Knob - Turning this knob clockwise determines the amount of gain (or distortion) added to the signal. A wide range of amp tones are available on this channel from Classic American Rock to Heavy Metal.
- LEVEL Control Knob - Turning this knob clockwise determines the overall volume of the OVERDRIVE channel.

TREBLE/MID/BASS controls
Tone controls or EQ. The BASS control boosts or cuts the amount of low frequency, or bass sound. TREBLE does the same for high frequencies, MID adjusts the midband frequencies.

PRESENCE control
This master PRESENCE control tailors the overall high frequency at of the EQ section.

DIGITAL EFFECTS section
Built-in digital effects custom voiced for Rampage amplifiers. Please see “Digital Effects” section in this manual for more descriptions of each sound and control operation.

SPEAKER SIM Button
Speaker Simulator - Press this button to engage the Speaker Simulator. This button has two functions

1) When using headphones or the line out jack on the back panel engage the Speaker Simulator for a “model” of the internal speaker - this is ideal for direct recording or jamming along with CDs or tapes in the headphones.

2) Engaging the Speaker Sim when you are NOT using headphones or the line out will provide a “creamier” tone to the EQ section. Experiment with this and select different pickups on your guitar...there is a wide range of tones available.
PHONE (HEADPHONE) jack
Plugging your headphones into this jack disconnects the sound going to the speakers and allows you to practice in private. Engage the Speaker Sim Button (Point 8) for a “model” of the internal speaker.

NOTE - When using with CD inputs be sure to turn the Levels down on both channels before unplugging headphones - see CD INPUT section next page.

POWER switch & LED
Turns the amp ON and OFF. When the LED is lit, the amp is on.

Digital Effects Section

1. EFFECTS MIX Control
This control allows you to adjust how much effect is added to the signal. For louder effects - turn the knob towards the “WET” setting. For less or softer effect - turn the knob towards the “DRY Setting.

2. EFFECTS SELECT Control
This control allows you to select 8 different effect presets that have been custom made for guitar players. There are several different effects ranging from Chorus, Delays, Tremolo and Reverb and various combinations of those in the most popular configurations.

<table>
<thead>
<tr>
<th>EFFECT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| CRS REV2 | MEDIUM RATE CHORUS and STADIUM REVERB  
HEAVY METAL MADNESS PRESET |
| ARENA | LONG DECAYING REVERB with LIGHT EARLY REFLECTIONS  
CLEAN SLOW SONG PRESET |
| HALL | SHORT DECAYING REVERB with HEAVY EARLY REFLECTIONS  
HEAVY ROCK AMBIENT PRESET |
| TREM REV | MEDIUM DECAYING REVERB passing thru MEDIUM RATE TREMOLO  
A KILLER SURF TONE PRESET |
| CRS DLY1 | SLOW RATE CHORUS with 232 ms DELAY light REGENERATION  
80s METAL PRESET |
| CRS REV1 | SLOW RATE CHORUS and STADIUM REVERB  
ROCK PRESET - GOOD FOR CLEAN AND DISTORTION - ACOUSTIC |
| CRS SLAP | SLOW RATE CHORUS with 90ms DELAY light REGENERATION  
COUNTRY CHICKEN PICKING PRESET/50S STYLE PRESET |
| ECHO | 592ms LONG DELAY with heavy REGENERATION  
MAJESTIC WAILING SOLO PRESET |
POWER INLET Module
The Power Inlet module accepts the detachable power cord included with the unit.

SPEAKER OUTPUT Jacks - Right & Left
Used to connect additional speaker cabinets if desired. The R50DSP will drive a 4x12 and sounds awesome. Connect only one additional 8 ohm cabinet per jack. Do not connect more than one per jack or you will damage your amp!

PREAMP OUT - TO EXT POWER AMP
This 1/4” jacks allows you to connect to a separate powered speaker cabinet or directly into a power amp - like the Rocktron Velocity 100 and from the power amp into two 4x12s, a stereo 4x12 or a stereo 2x12 cabinet. The preamp output is controlled by the master volume control.

LINE OUT - TO RECORDING DEVICE
This 1/4” jack allows you to connect to a PA system or recording device. The Speaker Simulator is always engaged for the best sound. You may also run the signal out to a power amp with volume controls and from there into a speaker cabinet. This output is ideal for direct connection to a PA system for live performances...it eliminates the need to use a microphone with the PA. The line output is not controlled by the master volume control.

CHAN/EFX FOOTSWITCH (Footswitch) Jack
To control CHANNEL selection, plug a single footswitch* into this jack. To control CHANNEL Selection and DIGITAL EFFECTS ON/OFF, use a double footswitch* with a stereo 1/4” jack.

CD INPUTS
These two RCA jack inputs allow for a direct connection by a CD player or Tape player to the amplifier. You can then jam along with CDs or tapes to rehearse songs, learn new songs or just for fun!

Warning!!! When using Headphones with the CD inputs - make sure you turn down the Levels on both channels BEFORE unplugging headphones - otherwise excessive CD volume will be produced.

*Rocktron Rampage single (RFS1) and double (RFS2) footswitches are available and sold separately.
**R50DSP Specifications**

<table>
<thead>
<tr>
<th>Power Output</th>
<th>40 Watts (20 watts per side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speakers</td>
<td>2 x 8” Velocity High Definition by Rocktron</td>
</tr>
<tr>
<td>EQ</td>
<td>Treble Passive Shelving Middle Passive Bandpass Bass Passive Shelving</td>
</tr>
<tr>
<td>Outputs:</td>
<td>Line 1/4” jack Preamp 1/4” jack</td>
</tr>
<tr>
<td>Headphone Output</td>
<td>1/4” Stereo jack</td>
</tr>
<tr>
<td>Speaker Outputs</td>
<td>2 x 1/4” - 8 ohms max per jack</td>
</tr>
<tr>
<td>Channels</td>
<td>Overdrive and Clean (Footswitchable)</td>
</tr>
<tr>
<td>Effects</td>
<td>Digital (Footswitchable)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>15”H x 20.9” W x 9.8”D (381 x 530 x 250 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>26.16 lbs. (12kg)</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>100 Volts AC 50/60Hz or 117 Volts AC, 50/60Hz or 220/240 Volts AC, 50/60Hz, as specified on chassis</td>
</tr>
</tbody>
</table>

**AGX (Automatic Gain Expander)**

Rocktron’s patented AGX system solves the long standing problem encountered by guitar players when using high gain distortion. The AGX circuit expands the gain of the amplification circuit only when required based on the input level. When no signal is present, the AGX circuit expands down the amplification level to a point where hum and noise are dramatically reduced.
Check out some of our other products:

**Rack Gear:**

- **Gainiac** (preamp w/12ax7 tube)
- **Chameleon 2000** (preamp w/multi-effects)
- **Voodu Valve** (preamp w/12ax7 tube and multi-effects)
- **Prophesy** (our top of the line preamp with multi-effects)
- **Intellifex On Line** (Multi-effects processor)
- **HUSH Super C** (guitar noise silencing system)
- **Vendetta VP4 Preamp** (All Tube 4-Channel Guitar preamp - 2 Rack Space)

**Stomp Boxes:**

- Rampage Distortion, Tsunami Chorus, Austin Gold Overdrive,
- HUSH The Pedal, Banshee Talkbox, Vertigo Vibe

**Electric Guitar - Acoustic Guitar and Bass Amplifiers:**

- **Vendetta Head** (100 W Head 4-Channels All Tube - MIDI Switchable)
- **Vendetta Combo** (100W 2x12 Combo - Celestion 90's all Tube -4-Channel - MIDI Switchable)
- **R80DSP** (80W 1x12 Amp w/Digital Effects)
- **RT122C** (120W 2x12 Amp w/Stereo Chorus, Reverb & Chromatic Tuner)
- **R120DSP** (120 Watt 2x10"Guitar Amp w/Digital Effects)
- **R50C** (40 Watt 2x8"Guitar Amp w/Reverb & Chorus)
- **R20** (20 Watt 1x8"Amp w/Reverb)  **R10** (10 Watt 1x6.5")
- **RA50DSP** (50W Acoustic Amp w/Digital Effects - Wedge Shape)
- **RA30DSP** (30W Acoustic Amp w/Digital Effects - Wedge Shape)
- **RB20** (Bass Amp 20W with 8" Speaker)  **RB30** (Bass Amp 30W with 10" Speaker)
- **RB60** (Bass Amp 60W with 12" Speaker)  **RB100** (Bass Amp 100W with 15" Speaker)

**Foot Controllers:**

- **MIDI Mate** (Midi Foot Controller)
- **MIDI XChange** (MIDI Footcontroller)
- **All Access** (Midi Foot Controller)
- **RMM900** (7-pin Din MIDI Cable)
- **RFS1 and RFS2** (Single and Double Latching Footswitchs for Rampage Amps)

**Speaker Cabs:**

- **S112** (1x12 Voiced Guitar Cab)
- **Vendetta 4x12s** (Slant & Straight w/ Celestion 30s)
R50DSP

ELECTRIC GUITAR AMPLIFIER WITH AGX TECHNOLOGY AND BUILT-IN DIGITAL EFFECTS

Rocktron - A Division of GHS Corporation
2813 Wilber Avenue
Battle Creek MI 49015
USA
Rocktron Phone: 1-(269)-968-3351
Email: info@rocktron.com